

**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee  1. Department of the Army Commander  2. <b>U.S. Army Joint Munitions Command</b> <b>AMSJM-SF</b> 1 Rock Island Arsenal Rock Island, IL 61299-6000		In accordance with letter dated <b>January 31, 2003</b>  3. License number SUC-1380 is amended in its entirety to read as follows:  4. Expiration date April 30, 2003  5. Docket No. 040-08767, SUB-1195  Reference No.
6. Byproduct, source, and/or special nuclear material  A. Depleted uranium  B. Depleted uranium	7. Chemical and/or physical form  A. Solid Metal alloy  B. Solid Metal alloy	8. Maximum amount that licensee may possess at any one time under this license  A. 42,000,000 Kilograms  B. 14,000 Kilograms
9. Authorized Use:  A. To be used for receipt, storage and transfer of military devices containing depleted uranium components.  B. For possession and storage incident to decommissioning of facilities.		

CONDITIONS

10. A. Licensed material listed in subitem 7.A. may be stored in bulk quantities at the Sierra Army Depot, Herlong, California; Seneca Army Depot, Romulus, New York; Hawthorne Army Ammunition Plant, Hawthorne, Nevada; the Letterkenny Army Depot, Chambersburg, Pennsylvania; Crane Army Activity, Crane, Indiana; Bluegrass Army Depot, Richmond, Kentucky; Anniston Army Depot, Anniston, Alabama; Tooele Army Depot, Tooele, Utah; McAlester Army Ammunition Plant, McAlester, Oklahoma; and Red River Army Depot, Texarkana, Texas. Licensed material for deployment may be stored at non-bulk locations at U.S. Army bases anywhere in the United States.
- B. Licensed material listed in Subitem 7.B. may be stored at the Lake City Army Ammunition plant, (LCAAP) Independence, Missouri, incident to decommissioning of facilities.
- i. The licensee is authorized to remediate Area 10 of LCAAP in accordance with the licensee's "Lake City Army Ammunition Plant Area 10 (Sandpile) Radioactive Contaminated Soil



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Decommissioning Plan," Revision 5.1, dated April 22, 1998. The licensee shall use the unrestricted use criteria listed in "Guidance for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of License for Byproduct, Source, or Special Nuclear Material" for surfaces of buildings and equipment, and the Branch Technical Position, "Disposal or Onsite Storage of Thorium or Uranium Wastes from Past Operations," for soils.

Specific values are given below-

## Soils:

Depleted uranium- 1.3 Bq/gm (35 pCi/gm) total uranium.

## Equipment and Surfaces:

5,000 dpm alpha/100 cm<sup>2</sup>; average contamination level over 1 m<sup>2</sup> or smaller area  
5,000 dpm beta-gamma/100 cm<sup>2</sup>; average contamination level over 1 m<sup>2</sup> or smaller area  
15,000 dpm alpha/100 cm<sup>2</sup>; maximum over 100 cm<sup>2</sup>  
15,000 dpm beta-gamma/100 cm<sup>2</sup>; maximum over 100 cm<sup>2</sup>  
1,000 dpm alpha/100 cm<sup>2</sup>; removable  
1,000 dpm beta-gamma/100 cm<sup>2</sup>; removable

## Exposure rate:

Soils - 2.6 nC/kg/hr (10 uR/hr) average above background at 1 meter  
Equipment and buildings - 1.3 nC/kg/hr (5 uR/hr) above background at 1 meter.

- ii. Once the small sand piles are removed the licensee shall perform a 100-percent surface scan, collect four samples per 10-meter by 10-meter grid, and perform an exposure rate measurement one meter above the ground surface. For the large sand pile the licensee shall perform a 100-percent scan of this material as it is being conveyed to the large storage sacks. Further, the licensee will collect one sample per 3- cubic meters (105-cubic feet). This is approximately four samples per a 10-meter by 10- meter grid. Once the large sand pile has been removed the licensee shall perform a 100-percent surface scan, collect four samples per each 10-meter by 10-meter grid, and perform an exposure rate measurement one meter above the ground surface.
- iii. Downwind area air sampling shall be performed when work activities would cause the potential of producing airborne radioactivity, such as earth moving.
- iv. The procedure for licensee-initiated and approved changes as described in Revision 5.1 to the LCAAP Area 10 (Sandpile) Radioactive Contaminated Soil Decommissioning Plan, dated April 22, 1998, may be used provided that:

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- a. Review of all proposed changes to the Area 10 Decommissioning Plan by the licensee's Project Manager (M. Styvaert) or his designees in accordance with Administrative Procedure AROP No. 102, "Revisions to the Operational Procedures";
  - b. The licensee submits to NRC, for approval, any changes that would result in an unreviewed safety question, a change in a license condition, or changes that would have a significant adverse effect on the quality of the work, the remediation objectives, or health and safety;
  - c. The licensee documents the changes made.
  - v. The licensee shall use the unrestricted use criteria listed in "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of License for Byproduct, Source or Special Nuclear Material" for surfaces of buildings and equipment.
- C. Licensed material listed in Subitem 7.B. may be stored at the Lake City Army Ammunition plant, (LCAAP), Independence, Missouri, incident to decommissioning of the facilities.
- i. The licensee is authorized to remediate both the 600-yard bullet catcher area and the southeast wing of Building 3A of LCAAP in accordance with the licensee's "Lake City Army Ammunition Plant, 600 Yard Bullet Catcher, Decommissioning Plan," Revision 2, dated June 2000, and letters dated March 22, 2001 (with enclosure) and March 30, 2001 (with enclosure). The licensee shall use the unrestricted use criteria listed in "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of License for Byproduct, Source, or Special Nuclear Material" for surfaces of buildings and equipment, and the Branch Technical Position, "Disposal or Onsite Storage of Thorium or Uranium Wastes from Past Operations," for soils. Further, the licensee is authorized to ship the resulting waste to a facility approved by NRC to receive and dispose of low-level radioactive/mixed waste.

Specific values are indicated below-

**Soils:**

Depleted uranium- 1.3 Bq/gm (35 pCi/gm) total uranium.

**Equipment and Surfaces:**

5,000 dpm alpha/100 cm<sup>2</sup>; average contamination level over 1 m<sup>2</sup> or smaller area

5,000 dpm beta-gamma/100 cm<sup>2</sup>; average contamination level over 1 m<sup>2</sup> or smaller area

15,000 dpm alpha/100 cm<sup>2</sup>; maximum over 100 cm<sup>2</sup>

15,000 dpm beta-gamma/100 cm<sup>2</sup>; maximum over 100 cm<sup>2</sup>

1,000 dpm alpha/100 cm<sup>2</sup>; removable

1,000 dpm beta-gamma/100 cm<sup>2</sup>; removable



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## Exposure rate:

Soils - 2.6 nC/kg/hr (10 uR/hr) average above background at 1 meter

Equipment and buildings - 1.3 nC/kg/hr (5 uR/hr) above background at 1 meter.

- ii. Downwind area air sampling shall be performed when work activities would cause the potential of producing airborne radioactivity, such as earthmoving.
  - iii. The licensee shall conduct a final status survey and sampling program of both the 600-yard bullet catcher area and the southeast wing of Building 3A of LCAAP in accordance with the December 1993, NUREG/CR-5849, "Manual for Conducting Radiological Surveys in Support of License Termination."
11. A. Licensed material shall be used by, or under the supervision of, Rosalene A. Graham, Kelly Crooks, Gary W. Buckrop, or Paul Grooms.
- B. The Radiation Safety Officer for this license is Kelly Crooks.
- C. The Alternative Radiation Safety Officer for this license is Gary W. Buckrop.
12. This license does not authorize the firing of ammunition containing licensed material.
13. The license shall not store more than 10,000,000 kilograms of licensed material at each bulk location and not more than 50,000 kilograms at each non-bulk storage location.
14. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated November 20, 1996; and

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- B. Letters dated march 17, 1997 (with enclosures), December 24, 1997 (with enclosure, excluding requests to change wording in License Condition 11.A. and excluding request to add License Condition 11.E.), August 26, 1998, October 1, 1998, June 10, 1999 (with enclosed memorandum dated April 27, 1999), April 7, 2000, August 7, 2000 (with enclosure), March 22, 2001 (with enclosure), March 30, 2001 (with enclosure), August 8, 2001 (with enclosures), October 8, 2002 and January 31, 2003.



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date APR 16 2003

By Loren J. Hueter  
Loren J. Hueter  
Materials Licensing Branch  
Region III



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
HEADQUARTERS, U.S. ARMY JOINT MUNITIONS COMMAND  
1 ROCK ISLAND ARSENAL  
ROCK ISLAND, IL 61299-6000

*file*  
*Gary*

January 31, 2003

Safety/Rad Waste Office

Administrator  
Nuclear Regulatory Commission  
Nuclear Materials Licensing Branch  
Region III  
801 Warrenville Road  
Lisle, Illinois 60532-4351

Dear Sir:

This letter is to inform you that the name of the Army command managing U.S. Army license numbers SUC-1380 and BML12-00722-07 has changed from the U.S. Army Operations Support Command (OSC) to the U.S. Army Joint Munitions Command (JMC). The command continues to be located on the Rock Island Arsenal, Rock Island, Illinois. When sending correspondence, please use the following address:

AMSJM-SF  
U.S. Army Joint Munitions Command  
1 Rock Island Arsenal  
Rock Island, Illinois 61299-6000

The office within the JMC that manages the two licenses listed above remains the Safety/Rad Waste Office. Mr. Kelly Crooks and Mr. Gary Buckrop remain the radiation safety officer and alternate, respectively. Please remove Mr. Paul Grooms as an alternate.

The point of contact is Mr. Gary Buckrop, Safety/Rad Waste Office, (309) 782-2969/0338, E-mail [amsjm-sf@osc.army.mil](mailto:amsjm-sf@osc.army.mil).

Sincerely,

SIGNED

*Glenn S. Leach*

Glenn S. Leach  
Acting Ch, Safety/Rad Waste Ofc

*Plk*